

**Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**AIR QUALITY PERMIT
Issued under 401 KAR 52:040**

Permittee Name: Hanson Brick East, LLC, dba Hanson Brick

Mailing Address: 15720 John J. Delaney Drive
Charlotte, North Carolina 28277

Source Name: Hanson Brick - Ashland
Mailing Address: Same as above

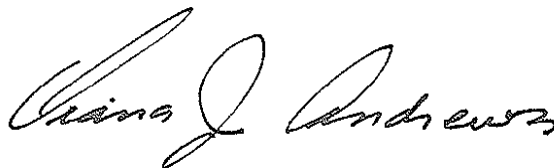
Source Location: 510 Highway 60 West
Ashland, Kentucky 41102

Permit Number: S-08-093
Source A. I. #: 352
Activity #: APE20080002
Review Type: Operating
Source ID #: 21-019-00008

Regional Office: Ashland Regional Office
1550 Wolohan Drive, Suite 1
Ashland, KY 41102-8942
(606) 929-5285

County: Boyd

Application
Complete Date: August 6, 2008
Issuance Date: August 14, 2008
Revision Date: N/A
Expiration Date: August 14, 2018



**John S. Lyons, Director
Division for Air Quality**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**BRICK DRYER / KILN OPERATION:**

- 01 (02) Tunnel Dryer**
(Maximum Rated Capacity – 5.7 tons/hour)
Constructed: 1973
Emission Controls: None
- (02) Natural Gas-Fired Tunnel Kiln**
(Maximum Rated Capacity – 5.7 tons/hour)
Constructed: 1973
Emission Controls: None

APPLICABLE REGULATIONS:

State Regulation 401 KAR 61:020, Existing process operations, which applies to emission units constructed before July 2, 1975.

State Regulation 401 KAR 53:010, Ambient air quality standards

1. Operating Limitations:

N/A

2. Emission Limitations:

- a. Pursuant to State Regulation 401 KAR 61:020, Section 3(2) and Appendix A:

- 1) Emissions of particulate matter from the tunnel dryer [emission point 01 (02)] shall not exceed 13.16 lbs/hr.
- 2) Emissions of particulate matter from the natural gas-fired tunnel kiln [emission point 01 (02)] shall not exceed 13.16 lbs/hr.

As determined by the following equation using the process weight rate (in units of tons/hr).

$$\text{For process rates up to 60,000 lbs/hr: } E = 4.10 P^{0.67}$$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

- b. Pursuant to Regulation 401 KAR 61:020, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than forty (40) percent opacity.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**2. Emission Limitations: (Continued)**

- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality secondary standards, emission concentrations of gaseous fluoride (HF) modeled beyond the property boundary shall not exceed the following averages more than once per year:

- 1) Maximum One-Week Average: 1.64 ug/m³
- 2) Maximum Twenty-Four-Hour Average: 2.86 ug/m³

Compliance Demonstration Method:

- a. Compliance with hourly emission limit shall be determined as follows:

Hourly Emission Rate = [Monthly processing rate x Emission Factor as determined from AP-42 * / (Hours of operation per month)] x (1 – control efficiency)

- * If an Emission Factor other than that taken from AP-42 is used, documentation on how that Emission Factor was derived must be submitted to the Division's Central Office for approval.

- b. In determining compliance with the opacity standard as listed above, the owner or operator shall use Reference Method 9, as listed in Recordkeeping Requirements below.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 50:055, General compliance requirements, 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using USEPA Method 5 or 17 (particulate matter) and Method 13B, 26, or 26A (hydrogen fluoride) shall be used as the stack test methods and shall be conducted as required by the Division.

4. Monitoring Requirements:

The permittee shall monitor and maintain records of the following parameters for the kiln and its associated dryer:

- 1) The monthly amount of bricks processed by each kiln / dryer,
- 2) The monthly hours of operation (hours operated / month) of each kiln / dryer.

5. Recordkeeping Requirements:

See Section C, General Conditions 2.a., 2.b., and 6.a.

6. Reporting Requirements:

See Section C, General Conditions 3.a., 3.b., 3.c., and 6.b.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**RAW MATERIAL HANDLING:****Receiving and Storage:**

- 02 (-) **Truck Loadout**
Control: Wet Suppression
- (-) **Stockpile**
Control: Wet Suppression
- (-) **Loadout (To Receiving Hopper)**
Control: Wet Suppression

Grinding Room:

- 02 (-) **Receiving Hopper**
Constructed: 1973
Control: Entire emission unit enclosed in a building.
- (-) **Grinder**
(Maximum Rated Capacity - 35 tons/hour)
Constructed: 1973
Control: Entire emission unit enclosed in a building.
- (-) **Conveyor and Transfer Points (To Main Plant)**
Constructed: 1973
Control: Entire emission unit enclosed in a building.

Main Plant:

- 02 (-) **Receiving Hopper**
(Maximum Rated Capacity - 150 tons/hour)
Constructed: 1973
Control: Entire emission unit enclosed in a building.
- (-) **Receiving Hopper**
(Maximum Rated Capacity - 150 tons/hour)
Constructed: 1973
Control: Entire emission unit enclosed in a building.
- (-) **Receiving Hopper**
(Maximum Rated Capacity - 75 tons/hour)
Constructed: 1973
Control: Entire emission unit enclosed in a building.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**RAW MATERIAL HANDLING: (CONTINUED)****Main Plant: (Continued)**

- 02 (-) **Screen**
 (Maximum Rated Capacity - 80 tons/hour)
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Conveyor and Transfer Points (To Storage Bin)**
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Storage Bin**
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Conveyor and Transfer Points**
 (From Storage Bin to Brick Forming)
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Brick Forming (Wet Process)**
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Cars (used for transporting brick to and from kiln) (Wet Process)**
 (From Brick Forming to Brick Dryer)
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Cars (used for transporting brick to and from kiln)**
 (From Brick Dryer to Kiln)
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Cars (used for transporting brick to and from kiln)**
 (From Kiln to Loading, Packaging, and Shipping Area)
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.
- (-) **Loading, Packaging, and Shipping**
 (From Kiln)
 Constructed: 1973
 Control: Entire emission unit enclosed in a building.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (07) Haul Road and Yard Area (Unpaved)
Control: Wet Suppression

APPLICABLE REGULATIONS:

State Regulation 401 KAR 63:010, Fugitive emissions, which applies to each of the affected facilities listed above.

1. Operating Limitations:

N/A

2. Emission Limitations:

- a. The materials processed at each affected facility listed above shall be controlled with wet suppression, enclosures, and/or dust collection equipment so as to comply with the requirements specified in Regulation 401 KAR 63:010, Fugitive emissions, Section 3. Standards for fugitive emissions.
- b. Pursuant to Regulation 401 KAR 63:010, Section 3 (1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
 - 1) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - 2) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - 3) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations.
 - 4) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - 5) The maintenance of paved roadways in a clean condition;
 - 6) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.
- c. Pursuant to Regulation 401 KAR 63:010, Section 3 (2), no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (Continued)

- d. Pursuant to Regulation 401 KAR 63:010, Section 3 (3), when dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or air-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.
- e. Pursuant to Regulation 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:
 - 1) Pursuant to Regulation 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.
 - 2) Pursuant to Regulation 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

Compliance Demonstration Method:

See Section C, General Condition 6.a.

3. Testing Requirements:

N/A

4. Monitoring Requirements:

See Section C, General Condition 6.a.

5. Recordkeeping Requirements:

See Section C, General Conditions 2.a., 2.b., and 6.a.

6. Reporting Requirements:

See Section C, General Conditions 3.a., 3.b., 3.c., and 6.b.

SECTION C - GENERAL CONDITIONS**1. Administrative Requirements**

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of State Regulation 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
- b. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- c. Any condition or portion of this permit, which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Section 1a, 11 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23]
- d. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Section 1a, 4, 5, of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23]
- e. This permit does not convey property rights or exclusive privileges. [Section 1a, 8 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- f. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
- g. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in State Regulation 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
- h. All permits previously issued to this source, at this location, are hereby null and void.

SECTION C - GENERAL CONDITIONS (CONTINUED)**2. Recordkeeping Requirements**

- a. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 52:040 Section 3(1)(f) and Section 1b, IV. 2) of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23]
- b. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to State Regulation 401 KAR 52:040, Section 21.

3. Reporting Requirements

- a.
 - 1) In accordance with the provisions of State Regulation 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a) When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b) When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - 2) The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions [other than emission exceedances covered by Reporting Requirement condition 1 a) above], the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report. [Section 1b, V. 3) of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23]
- b. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23]

SECTION C - GENERAL CONDITIONS (CONTINUED)**3. Reporting Requirements (Continued)**

- c. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

4. Inspections

In accordance with the requirements of State Regulation 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency.

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
- b. To access and copy any records required by the permit.
- c. Inspect any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
- d. Sample or monitor substances or parameters to assure compliance with the permit or any applicable requirements.

5. Emergencies/Enforcement Provisions

- a. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23]
- b. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - 1) An emergency occurred and the permittee can identify the cause of the emergency;
 - 2) The permitted facility was at the time being properly operated;
 - 3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit;

SECTION C - GENERAL CONDITIONS (CONTINUED)**5. Emergencies/Enforcement Provisions (Continued)**

- b. 4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- c. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement. [401 KAR 52:040, Section 22(1)]
- d. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)]

6. Compliance

- a. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
 - 1) Pursuant to State Regulation 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.
 - 2) All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non routine maintenance performed on each control device. Daily observations are required during daylight hours of all operations, control equipment and any visible emissions to determine whether conditions appear to be either normal or abnormal. If the operations, controls and/or emissions appear abnormal, the permittee must then comply with the requirements of Section C – General Conditions, 3.a.2), of this permit.
 - 3) A log of the monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program (spread sheets), calculations or performance tests as may be specified by the Division.
- b. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - 1) Identification of the term or condition;

SECTION C - GENERAL CONDITIONS (CONTINUED)

6. Compliance (Continued)

- b.
 - 2) Compliance status of each term or condition of the permit;
 - 3) Whether compliance was continuous or intermittent;
 - 4) The method used for determining the compliance status for the source, currently and over the reporting period; and
 - 5) For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- 6) The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

| | |
|-----------------------------|--------------------------|
| Division for Air Quality | Division for Air Quality |
| Ashland Regional Office | Central Files |
| 1550 Wolohan Drive, Suite 1 | 803 Schenkel Lane |
| Ashland, KY 41102-8942 | Frankfort, KY 40601 |
- c. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all applicable requirements for:
 - 1) Applicable requirements included and specifically identified in the permit; or
 - 2) Non-applicable requirements expressly identified in this permit.